

Russia and Beyond– a Case for European Missile Defense

**A Monograph
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Abstract

Russia and Beyond – A Case for European Missile Defense, by MAJ Robert A. Murphy, US Army, 40 pages.

The deployment of a US Ground-based Mid-course ballistic missile Defense (GMD) within what Russia considers its rightful sphere of influence is an unacceptable challenge to Russian national security. Russians, according to Makhmut Gareev, believe that Russia "...has been under siege for at least 300 years. And still is."¹

Energy-based economic power cause Russia to react to intolerable Western involvement in regional affairs. Additionally, Vladimir Putin's foreign policy pursuits require broad support from varied political ideologies. NATO pursuit of membership for the Ukraine and Georgia in NATO, US recognition of an independent Kosovo, and US withdrawal from the Anti-Ballistic Missile (ABM) treaty compound Putin's problems and exacerbate tensions within US-Russian relations.

Given the focus of attention to Russian opposition to GMD, broader issues involving GMD deployment, including the Iranian threat, are overlooked. The stated target of the GMD deployment is Iran, in the forms of ballistic missile and nuclear programs. Whereas Russian decision-making is difficult to predict, Iran's is inscrutable. That there is a constant formal dialogue between Russia and the US over GMD highlights the difference between the political problem with Russia and the practical problem with Iran. Through an intimate review of the entire scope of the GMD plan one begins to understand the system's value to American national security beyond Russia.

According to the US, GMD represents no threat to Russia, political or practical. US policy stresses peaceful relations with Russia, and highlights GMD's inability to intercept Russia's nuclear strike capability. Given the tension between the practical benefits of GMD, and the negative impact its deployment has on Russo-American relations, the question is whether or not GMD's benefits outweigh its consequences. Viewed broadly, the answer is a resounding yes.

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Chapter 1. Introduction

The deployment of the GMD system to Europe is an essential component of the nuclear and Weapon of Mass Effect (WME) defense portion of US National Security policy. Whereas Russian opposition forms the most visible issue regarding the program, an understanding of the contemporary and future threat environment exposes a broader purpose to the program's existence. Beyond the practical aspects of defense, GMD provides essential tools for American policy across the Diplomatic, Informational and Economic spectrum. GMD's suitability within the US National Security Strategy is based on its ability to (1) provide diplomatic leverage with Russia, (2) compensate for the lack of a deterrent to Iran (3) its ability to intercept a long-range missile originating in the Middle East aimed at Europe and (4) its compatibility with NATO security plans.

On 15 August 2008, US Secretary of State Condoleezza Rice concluded a missile defense treaty with Poland permitting the deployment of a Ground-Based, Mid-Course intercept Missile Defense System (GMD) to Polish territory. Following years of negotiation between Poland, the Czech Republic (where the X-Band radar for the system is to be deployed), and the United States, the agreement fulfilled a key policy goal of the Bush administration. The National Security Presidential Directive 23 (NSPD-23) that President Bush signed in 2002 described the emerging ballistic missile threat from "rogue" nations, explicitly North Korea and Iran, as the administration's highest priority effort.² The timing of the bilateral Polish agreement, which came only days after Russia's ground incursion into the Republic of Georgia, signified the latest in a series of US foreign policy moves challenging Russia's influence among its neighbors, and contributed to the Russian perception that GMD points squarely at Russia, practically and politically. This focus on Russia draws attention from a holistic understanding of the system's purpose.

² The White House, *National Presidential Security Directive – 23, National Policy on Missile Defense* (Washington, D.C., <http://fas.org/irp/offdocs/nspd/nspd-23.htm>, December 16, 2002), 5.

In arguing for the deployment of GMD, an appreciation of the diplomatic utility of GMD in relations with Russia is necessary, along with an understanding of the practical value of the program.

A summary of the planned deployment of GMD facilitates understanding the system's deployment challenges, especially in its current manifestation. As an introduction, there are a few critical points to note. Operationally, European GMD works within the framework of the larger US Ballistic Missile Defense System (BMDS). This is a multi-layered system of acquisition and guidance radars and intercept platforms covering both the Pacific, Arctic and Atlantic zones. Of these layers and systems, only two are fully tested and validated: the X-Band radar and the Aegis Missile Cruiser. The system that is to deploy in 2011-2013 centers on a two-stage, ground-based interceptor that will enter into its final two tests in 2009. Significant controversy surrounds the interceptor's capability, to include skepticism from the current US administration. Current coverage of our European allies and US facilities in Europe is minimal and arguably insufficient to meet future threats.

The contemporary and future threat environment clarifies GMD's role in US security strategy. The GMD deployment to Europe, as declared by the US, provides "*...a defense of Europe against a limited intermediate and long-range ballistic missile attack from the Middle East, and provides additional capability to the current missile defense system located in Alaska and California to defend the United States.*"³ Specifically mentioned as a threat by the US Missile Defense Agency (MDA), Iran's strategic weapons capabilities require analysis and comparison with the Iranian regime's propensity to use them. Russia's strong opposition to the plan demands a similar analysis, albeit on a more political than technical level. Whereas Russia and Iran have unique decision-making processes, understanding both of these nations' capabilities and policy processes suggests ways in which GMD can fit into US strategy towards both nations.

³ Missile Defense Agency, Fact Sheet, available from <http://www.mda.mil/mdalink/pdf/esi.pdf> ; Internet; accessed 8 January, 2009.

In reality, the value of the GMD is not simply in its technical capability to intercept a missile.⁴ Although the ability to do so is crucial to the viability of the program, GMD's diplomatic value is that it provides leverage with Russia. Possessing an irritant invites opportunities to negotiate with Russia over such critical issues as the upcoming Strategic Arms Reduction Treaty and Russia's support to the Iranian nuclear energy program.

The essence of any discussion regarding GMD is the context of the target; GMD presents opportunities to address the vast differences between Russian and Iranian threats. The Russian threat is more political in nature, and subject to diplomatic tradition and compromise with the US. It is subject to theories of arms control and stability for which there are established protocols. Iran poses a real practical threat, compounded by the lack of any formal diplomatic contact and a history of virulent hatred for the US. It is therefore impossible to accurately understand the logic of this rival and form a deterrent. By applying context to theory in the case of Russia, or the lack of theory, in the case of Iran, GMD's appropriateness becomes clearer.

⁴ James E. Dougherty and Robert L. Pfaltzgraff, Jr., *Contending Theories of International Relations, a Comprehensive Survey* (New York: Longman, 2001), 392. However, "Effective deterrence will always be a function of real capabilities and the perception of a credible national will to respond to aggression."

Chapter 2. Description of the GMD plan

MDA supports the deployment of GMD at the arguable expense of proper testing and development, planning for complete deployment by 2013. Technical critics argue that the deployment is premature, and suggest that existing platforms are adequate until the system is refined. Furthermore, withdrawal from the Anti-Ballistic Missile Treaty, which allowed GMD to be operationalized and deployed, presents substantial challenges to other aspects of security strategy, such as proliferation and arms control agreements.

Current Deployment Plan

The MDA plan for deployment of the GMD system to Europe between 2011 and 2013 involves two critical facilities: an intercept silo base in Northern Poland, and an X-Band radar array in a former artillery training area near the town of Trokavice in Western Czech Republic.⁵ Additional GMD assets include a mobile X-Band radar array moving between positions in South Eastern Europe and Turkey, and a patriot missile battery to protect the missile silos in Poland. The latter is a result of a US compromise on long-term Polish requests for an improvement in joint regional air defense⁶ and was essential to achieve Polish consent for the basing plan.

The GMD silo facility is remarkably small, spanning a 40 x 150 yard area, similar in size to a soccer field. Ten silos hold the booster vehicles that deliver the Exo-Atmospheric Kill Vehicle (EKV) to its intended target.⁷ The ground-based X-band radar array moves from the Pacific in 2011, with an expected deployment completion date sometime in 2013 at a cost of \$500 million. Manned by over 200 US personnel, the radar system represents the first permanent stationing of US troops in the Czech

⁵ MDA, European Missile Defense Assets, available from <http://www.mda.mil/mdalink/pdf/euroassets.pdf>; Internet; accessed November 2008.

⁶ Karen DeYoung "U.S., Poland Closer to Deal on Missile Defense" *The Wall Street Journal*, February 2, 2008, available from <http://www.washingtonpost.com/wp-dyn/content/article/2008/02/01/AR2008020101910.html>; Internet; accessed February 2009.

⁷ MDA, European Missile Defense Assets, available from <http://www.mda.mil/mdalink/pdf/euroassets.pdf>; Internet; accessed November 2008.

Republic since the end of the Cold War. Troop stationing has met strong political opposition to what some Czech politicians perceive as an imposition on Czech sovereignty.⁸ In addition to these concerns over sovereignty, potential health hazards from radar emissions are contentious.

Although the MDA stresses the radar's superb safety record⁹, a substantial number of system opponents present compelling counter arguments regarding the risk to the health of the population residing in its vicinity. Significantly, the local political leadership, while emphasizing their general support for the US, strongly opposes the basing of the system in the area, specifically regarding potential health risks and targeting by Russian forces and terrorists.¹⁰ Despite overwhelming opposition to the system in recent polls, the deployment agreement was ratified by the upper house of the Czech parliament by 49-32 votes. With opposition strongest in the lower house, final ratification is impossible to predict.¹¹

The selection of locations in Europe is clearer once the technical operation of the entire system is explained. As an integrated system, European GMD operates within the larger Ballistic Missile Defense (BMD) plan of the US and NATO, relying on higher echelon assets for launch detection and back up intercept. The current system deployment anticipates attacks on both the US and Europe originating from the Middle East. Specifically focused on Iran, the system relies on BMD satellite identification of an Iranian missile launch.

The mobile, broad-array X-band radar, deployed closer to Iran than the fixed X-Band radar, confirms launch data. The threat missile's location and trajectory are transmitted to the larger X-Band facility in the Czech Republic, which acquires the target on a narrow beam and provides guidance and

⁸ NATO, Visit to the Czech Republic by the NATO Science and Technology Committee, 27 June 2007, available from <http://www.nato-pa.int/default.Asp?SHORTCUT=1262>; Internet; accessed November, 2008.

⁹ MDA, European Missile Defense Assets, 6

¹⁰ NATO.

¹¹ Missile Defence Advocacy Association, Missile Defense News, 27 December 2008, available from http://mdaa.dcwebdev.com/news_Category.aspx?categoryID=11&news_id=1443; Internet; accessed January 2009 and Zachovalova, Katarina, "Missile Defense Radar Clears First Vote in Czech Republic," *Europe News*, November 27, 2008.

firing solutions to the interceptors. Intercept calculations process through the US-based command and control facility and are programmed into the interceptor prior to launch. The booster rocket launches the EKV into an intercept trajectory with the threat missile and deploys the EKV. The EKV, operating on kinetic energy, strikes the threat missile approximately 200km above the Earth's surfaces and disintegrates it (figure 1). In the event the EKV is unable to intercept the target, other ground and sea-based interceptors based in the US and around Europe provide back-up coverage. Aegis missile cruisers and Terminal High-Altitude Air Defense (THAAD) platforms constitute the current missile defense solution for NATO and the United States. Alone, Aegis and THAAD have less capability to intercept missiles than GMD and present challenges of location. Aegis cruisers and THAAD batteries may not always be available where they can intercept a missile launch.

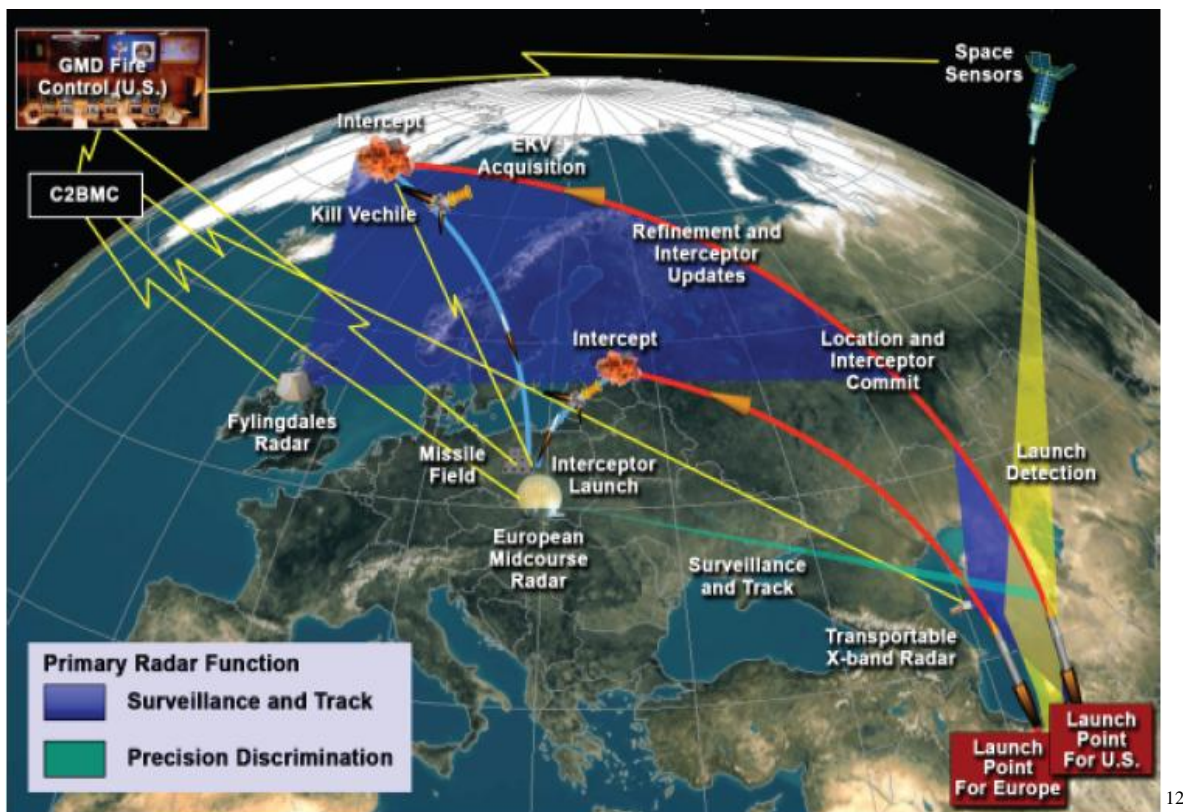


Figure 1. MDA's GMD Intercept Integration Plan.

¹² MDA, European Missile Defense assets. 8.

The selection of a mid-course interceptor over other forms of intercept, such as boost or terminal phase intercepts is an issue of technology. A boost phase intercept occurs between the point of launch and prior to entry into the exosphere. Boost phase intercepts are favored because the threat missile has not deployed countermeasures, is relatively slow as it fights Earth's gravity, and it offers more opportunities for back-up systems to intercept should the initial attempt fail. However, the technical reality is that the capability, especially as it relates to Iran, is far behind that of the GMD. MDA's two boost phase programs, an airborne laser (mounted in a Boeing 747) and a kinetic energy interceptor are still participating in initial testing, with no projected fielding dates.¹³ Boost phase also requires far quicker reaction times requiring systems to be closer basing to the launch site and as yet undeveloped artificial intelligence capabilities to reduce reaction times.

A terminal phase intercept occurs as the warhead returns to Earth's atmosphere. The least desirable option, terminal intercepts have an extremely short engagement window (generally one minute or less), present substantial risk from falling debris and is susceptible to the entire range of missile countermeasures, especially decoys. Although proven systems, such as Patriot Bloc 3, exist to execute terminal intercepts, they are generally considered a back up to intercepts at earlier phases.¹⁴

In addition to the technical availability of GMD, a mid-course intercept offers other advantages. It offers the longest window for intercept, it is the most predictable trajectory stage (post-rocket burn-out and length of tracking time), and allows for more interceptors to launch, increasing the probability of hit.¹⁵ There is an undeniable advantage also in that should a missile be armed with a WME warhead, debris will be scattered or vaporized outside of Earth's atmosphere. Addressing concerns regarding falling debris, the MDA states that any nuclear, chemical or biological debris vaporize on impact, and that

¹³ MDA, Boost Phase Intercept, available from <http://www.mda.mil/mdalink/html/boost.html>; Internet; accessed November, 2008.

¹⁴ MDA, Terminal Phase Intercept, available from <http://www.mda.mil/mdalink/html/terminal.html>; Internet; accessed November, 2008.

¹⁵ MDA, Mid-Course Intercept, available from <http://www.mda.mil/mdalink/html/midcrse.html>; Internet; accessed November, 2008.

other debris is largely destroyed on entry into the Earth's atmosphere. Any remaining particles would be of negligible size.¹⁶

Poland provides the optimal location for a mid-course intercept of a ballistic missile originating in the Middle East with a target in Europe or the US. Although Russia has offered the use of one of its facilities in Azerbaijan, the site's proximity to the potential launch site and the relative regional instability make the location unsuitable for a mid-course interceptor base.

Testing and controversy

Testing of the GMD began in 1999, since which the system has successfully intercepted 9 of 13 targets, albeit with varying degrees of target difficulty.¹⁷ Despite these successes, the limited volume of test data and dubious sophistication of the targets have created understandable doubt within the Obama Administration over the cost of an "unproven" system.¹⁸ MDA has already declared the next round of tests, which include the first target system to use decoys, to be the culminating test event to validate the Ground Based Missile Defense System (GBMDS). However, by referring to "GBMDS", MDA does not specify which type of ground-based missile within the program would be tested.¹⁹ Given the capability differences, particularly time of flight, between a three-stage (commonly tested) and the European planned two-stage interceptor, interpretation of test results is controversial. This is particularly important since the two-stage variant has not been tested and is not scheduled to be tested until late 2009.²⁰

¹⁶ MDA, European Missile Defense assets. 10

¹⁷ MDA, Ballistic Missile Defense Flight Test Record available from <http://www.mda.mil/mdalink/pdf/testrecord.pdf>; Internet; Accessed 22 January 2009.

¹⁸ "Missile Defense : Cool Heads" *The Economist*, January 31, 2009, 56.

¹⁹ A. Vinod Kumar, "BMD's Slow Progress Towards Technological Maturity." Institute For Defense Studies and Analysis, available from <http://www.idsa.in/publications/stratcomments/VinodKumar121007.htm>; Internet, accessed January 2009. Kumar quotes the MDA Director, LTG Obering, "...the final part of the GBMDS tests would involve counter-measures." In March 2009, it was announced that the summer 2009 test would not involve a target vehicle, but would simply involve a test of the EKV boost rocket and the command and control process.

²⁰ Daryl G. Kimball, "Rethink European Missile Defense" available from http://www.armscontrol.org/act/2008_07-08/focus; Internet; accessed 12 AUG 2008.

Charged with creating realistic and cost effective targets, MDA's Targets and Countermeasures division works in conjunction with the MDA Combined Test Force (CTF) to produce a realistic threat and gradually increase the sophistication of the target vehicles. However, the CTF's mission statement focuses on "demonstrating BMDS capabilities" and "validating BMS models and simulations" rather than challenging the capabilities of the system.²¹ The implication that MDA's focus is on obtaining political approval of the system, as is, contributes to speculation within the defense community that tests are deliberately "dumbed down" to win political support. The poor history of BMD missile testing and the legitimacy of some of its critics support this speculation.

Dr. Theodore Postol, Professor of Physics at the Lincoln Defense Research Laboratory at the Massachusetts Institute of Technology (MIT), is one of GMD's primary critics. Having been a research director for the missile program at the Lincoln lab and author of a technically thorough rebuttal to MDA statements, Dr. Postol presents one of several credible challenges to MDA's claims to policy-makers. Specifically, Dr. Postol believes that testing is over simplified by the omission of legitimate target characteristics such as decoys and that MDA has purposely mislead congress on the program's capabilities.²² Postol alerted authorities to testing improprieties forced on Lincoln Laboratory researchers involved in the BMD program. However, his attempts were thwarted by the appointment of an investigative panel chaired by Norman Augustine, CEO of Lockheed Martin during that company's missile development contract with MDA.²³

Testifying before Congress, Dr. Postol specifically challenged MDA's testimony on the system's capabilities and limitations. Dr. Postol argues that (1) that there are unresolved engineering and technical

²¹ MDA, Combined Test Force, available from www.mda.mil/CTF/; Internet; accessed January 2009.

²² Theodore A. Postol, "The Proposed US Missile Defense in Europe: Technological Issues Relevant to Policy." (Washington D.C.: American Association for the Advancement of Science, August 28, 2007), 5. Dr. Postol claims MDA deliberately presented erroneous flight data to show GMD's inability to intercept Russian missiles. Specifically, Dr. Postol claims MDA overstates ICBM flight speed by 15% and understates interceptor speed by more than 30% to mitigate concerns over Russian opposition to the program.

²³ Brendan B. Godfrey, Dr. "Investigation of Alleged Research Misconduct by Lincoln Laboratory Members of the 1998-5 POET Study Team." (Air Force Office of Scientific Research, January 2007).

problems with GMD that make it no more useful than current missile defense, (2) that the X-Band radar is “...*woefully inadequate*...” for the mission of acquisition and surveillance, and (3) GMD, once properly developed and deployed can indeed intercept Russian missiles directed at the US east coast.²⁴ Postol further argues that the capacity to intercept Iranian missiles already exists in the proven capabilities of other BMDS assets such as Aegis missile cruisers, given one stationed in either the Mediterranean or North Sea.

As it relates to intercepting missiles originating in Russia, MDA takes thorough pains to explain how it is impossible for a US mid-course interceptor, based in Poland, to interfere with a Russian launched long-range ballistic missile. According to MDA, proximity of the GMD to its target eliminates its ability to intercept it. Through a presentation of ballistic trajectories and missile speeds (which are disputed by critics), MDA makes a technical argument that under no circumstances could GMD’s current configuration pose a threat to Russian missile strikes. Additionally, given the narrow beam of the X-Band radar, EKV guidance and acquisition would be impossible unless the X-Band radar were aimed at Russia, emissions of which would be detectable by Russian defense systems. A further MDA argument against the potential threat to Russian long-range missile launch is volume. Given 10 interceptors and hundreds of potential Russian missile launches, MDA presents the mathematical reality that the system as planned could not pose a legitimate threat to Russian missile deployment.

Despite MDA’s assurances, Russia maintains its technical disbelief in MDA’s arguments (supported by Dr. Postol’s presentation to Congress).²⁵ Russia logically assumes that US capabilities will improve with time, leading to an eventual capability to intercept all Russian missile threats. Furthermore, the Russians firmly believe that the deployment of 10 missile interceptors is the beginning of a large-scale

²⁴ Postol. 3. Postol’s opinion of the X-band radar is questionable. MAJ Glenn Hemke, former officer in charge of classified portions of the BMDS and current SAMS student, confirms that the X-Band radar is extremely accurate and suitable for its mission to calculate missile trajectories and distinguish missiles from decoys.

²⁵ Postol. 13

deployment of missile interceptors designed to marginalize Russia's only legitimate military deterrent, its strategic rocket forces.²⁶

Russia is also aware that the X-Band radar can be cued to operate on a much broader beam if required, and can differentiate targets in what is termed "bussing operations". In this critical phase of a ballistic missile's flight, the independent warheads and decoys separate from the booster rocket and begin their deployment. The ability to separate actual warheads from decoys is a difficult to achieve capability of any missile defense program and greatly increases the likelihood of intercept. It further reduces the need for large numbers of interceptors, as those used become more precise. Aware of its inability to compete with US technology and aware of its temporal economic strength, Russia is completely opposed to allowing America to establish a missile defense presence on its borders. Any success the US hopes to achieve in convincing Russia of GMD's non-threatening character must be grounded in an understanding of these Russian concerns.

International Agreements

Further aggravating US relations with Russia is that developing and deploying GMD was the obvious purpose behind the US withdrawal from the Anti-Ballistic Missile (ABM) treaty. Signed in 1972 and designed to stabilize mutual strike capabilities, the ABM treaty, in conjunction with the Strategic Arms Limitation Treaty (SALT) and Strategic Arms Reduction Treaty (START) series of talks had been the cornerstones of US-Russian relations. The US withdrawal from the ABM in June 2002 met with widespread domestic and international opposition that has since only increased. In January 2008, Henry Kissinger, Sam Nunn, Richard Lugar, William Perry and George P. Schultz published a highly critical article in the Wall Street Journal entitled *Toward a Nuclear-Free World*.²⁷ The article contends that

²⁶ Kimball. 2

²⁷ William J. Perry et al., eds. "Toward a Nuclear-Free World." *Wall Street Journal*, 15 January, 2008, available from http://www.2020visioncampaign.org/pages/336/Renewed_call_from_Kissinger_Nunn_Perry_and_Shultz_for_Nuclear-Free_World; Internet; accessed November 2008.

withdrawal from ABM to pursue GMD has had an adverse impact on protocols for nuclear proliferation, strategic strike parity and enforcement provisions for existing arms limitation treaties. This is evidenced by Russia's withdrawal from the Conventional Forces in Europe Treaty (CFE) in July 2007, and its aggressive pursuit and acquisition of a hypersonic ballistic missile (Topol-M and Bulava) and Ballistic Missile Submarine (Borei class) to counter improved missile defense technology.²⁸ The Russian threat to deploy its highly effective Iskander short-range ballistic missile closer to Poland is only the most recent manifestation of Russia's reaction. The threat to international stability posed by withdrawal from the ABM, compounded by the deployment of missile defense systems to Europe, is an affront to Cold War deterrence theory, and indicates a shift in US policy towards more contemporary, explicit threats.

GMD therefore offers the US an array of opportunities and challenges. Whereas the technology to make theater missile defense in Europe viable is in contention, its capabilities, once fielded and proven, are undeniably attractive to both European and American defense policy makers. US withdrawal from ABM allows the development and deployment of ballistic missile defense but challenges an established international security regime and poses significant long-term risks to other aspects of US defense policy. Policy makers must weigh the cost of losing ground on proliferation and arms reduction agreements for the sake of pursuing European ballistic missile defense. The comparative analysis of capability versus threat is therefore necessary when judging the system's compatibility and appropriateness to national security.

NATO support for GMD

At the NATO summit in Riga in 2006, NATO agreed to the US request to examine the feasibility of deploying a missile defense system to Europe. The examining body focused on political and economic

²⁸ "First Russian Federation submarine hits the water; missile defense update." *Institute for the Study of Conflict, Ideology, and Policy*, 26 April, 2007, available from <http://www.bu.edu/phpbin/news-cms/news/?dept=732&id=44774>; Internet; accessed February 2009.

issues, assuming that the program was technically feasible.²⁹ NATO's endorsement of the program at the 2008 Bucharest summit was therefore the result of a careful European assessment of the risks and benefits of the system, not only to NATO, but also to the individual members. That NATO chose to support GMD over a Membership Action Plan for Georgia and the Ukraine suggested which of the two US priorities was more acceptable to the European community.³⁰ NATO Secretary General de Hoop Scheffer confirmed NATO's approval of GMD at remarks with Vice President Biden in Munich in February 2009.³¹

Already suffering from tense relations with Russia, Poland has endured a consistent string of diplomatic and economic attacks from its neighbor in the form of beef import bans to being completely bypassed by a natural gas pipeline from Russia to Germany under the Baltic Sea. Ever mindful of its unhappy geographic position, Poland has committed itself to Western Europe and the US, further agitating Russia. The Czech Republic has undergone a similar political process. Although under less overt pressure from Russia, Czech politicians have agreed to host the X-band radar at considerable domestic risk. Having garnered these commitments, any US abandonment of GMD to favor Russian relations would be catastrophic to the alliance.

²⁹ NATO. Riga Summit Declaration, 29 November, 2006, available from http://www.nato.int/docu/pr/2006/p06-150e.htm#eapc_pfp:Internet; accessed November 2008. Specifically, the panel addressed whether or not such a program would be accepted domestically, and what the economic impacts of angering Russia would be.

³⁰ NATO, Bucharest Summit Declaration, available from <http://www.nato.int/docu/pr/2008/p08-049e.html>; Internet; accessed January 2009. Explicit support for GMD was made in conjunction with a statement of hope for future cooperation on missile defense with Russia.

³¹ Jan De Hoop Scheffer, "Remarks at the NATO Munich Security Conference." 7 February 2009, available from <http://www.nato.int/docu/speech/2009/s090207a.html>; Internet; accessed March 2009. Scheffer reaffirmed that missile defense was an opportunity for renewed Russian cooperation with NATO, while highlighting the unacceptability of Russian actions in Georgia and its continued pressure on former Soviet states that are now full NATO members.

Chapter 3. Contemporary and Future Threats

As Vladimir Putin changed the nature and composition of Russia's policy-making apparatus upon his election in December 1999, so too did Mohammed Khatami's election to the Iranian presidency in 1997 alter Iranian policymaking. Furthering the unpredictability wrought by both of these elections was the succession of Mahmoud Ahmedinijad in Iran in 2005, and to a lesser extent, Dmitri Medvedev in Russia in 2008. Both nations are primarily affected by the deployment of the GMD to Europe, Iran explicitly, Russia indirectly. Understanding these nations' security capabilities, strategies, and ambitions is therefore essential when considering the appropriateness of GMD to US security policy.

Understanding the adversary's rationality is critical when developing policy. Specifically, political leaders must understand the priorities of ends that the state hopes to achieve, and the extent to which they will pursue those ends. As important as understanding the preferences of the temporal leader of a state is an understanding of the functions of state related to decision making. In the case of a less familiar entity such as Iran, "...it follows that preparation for deterrence failure will become increasingly important."³²

Iran

The scenarios that would draw Iran and the US into conflicts involving long-range ballistic missiles are numerous. The complexity of Iranian strategic decision-making makes predicting Iranian behavior difficult, especially as it nears technological success with its nuclear and missile programs. However, based on current Iranian politics, Iranian belligerence towards the West and pursuit of increasing strategic capability will continue.

Western observers must be careful not to mirror Western concepts of power structure and rationality onto the Iranian system. The most visible difference is the divide between what the President

³² Dougherty. 384-5 "Thus, the preferences of the leader are not the issue; the process by which such preferences are developed, adopted, and executed shapes the definition of rationality."

of Iran says and what he can actually do. Partly veiled by the trappings of a quasi-representative government is the power of the Supreme Leader, Ayatollah Khamenei. Between the Ayatollah's relative absence from the international media, and Ahmedinejad's prolific appearances, it is easy to assume that the President has more power than he actually does. Sitting atop a cadre of religious scholars and defenders of Shi'a Islam, the Ayatollah possesses a near autocratic grip on Iranian decision-making.

Elected for life, the Supreme Leader can only be deposed by the unanimous and highly unlikely vote of the Assembly of Experts, candidates for which are selected by the Ayatollah himself. Despite this relative absolutism, several key organs within the Iranian government influence the Ayatollah's foreign policy decisions. Among these are the ultra-conservative Expediency Council, the Iranian Revolutionary Guards Council (IRGC), the regular armed forces, and the multiple Iranian intelligence services. Added to their competing demands are those of the people. The Ayatollah, the mullahs, and generals that make up his counsel are constantly managing the delicate balance between satisfying populist politics and defending the Islamic revolution. The impact of domestic policy on Iran's actions regarding its nuclear and ballistic missile program cannot be underestimated. As the saying goes, all politics are local.

The Expediency Council is the dominant figure in the Iranian policy apparatus. Since assuming power in 1989 from Ayatollah Khomeini, Khamenei has expanded the council's influence, most notably by granting it authority in 2003 to act in a supervisory role over all of government. The council is religiously orthodox and conservative, dedicated to preserving the Islamic revolution. In addition to Iran's policy toward the west, the council strongly favors expansion of Shi'a Islam in the Gulf region, and is generally pleased with the outcome of a Shi'a majority government in Iraq. Combined with the views of the Ayatollah, who is consistently bellicose towards the West over missile development and nuclear

power, this grouping of policy-makers is highly unlikely to abandon its ballistic missile and weapons research programs.³³

Ironically, under Khamenei's predecessor, the use of WME was explicitly condemned as un-Islamic. Under the deposed Shah, Iran had pursued a program of Nuclear, Biological and Chemical weapons development with limited Western assistance. The new Islamic regime abolished these programs and pursued conventional means for its defensive needs. However, the experience of the Iran-Iraq war, specifically Iraq's extensive use of chemical weapons triggered a change in Iran's policy. Shocked by the attacks, Iran aggressively pursued international condemnation of Iraq's grievous violations of the Geneva Conventions. Enormously disappointed by the international community's lukewarm censure of Iraq, particularly America's weak response, Iran changed course. Drawing a hard lesson in realism, Iran reluctantly abandoned its moral stand and began a program of its own.

In 1988, Hashemi Rafsanjani, speaker of the Iranian parliament, expressed his disappointment and announced Iran's formal pursuit of unconventional weapons. Stating: *"It was ... made very clear that the moral teachings of the world are not very effective ... the world does not respect its own resolutions, and closes its eyes to the violations... We should fully equip ourselves in the defensive and offensive use of chemical, bacteriological and radiological weapons."*³⁴ Sadly, America's support of Israel's pursuit of unconventional weapons and missile programs contributes to this Iranian pragmatism. Furthermore, the world's relative silence to Iran's outrage over Iraqi use of chemical weapons contributes to its current derision for international efforts to curb Iran's missile and nuclear programs. North Korea's success in defying the international community and its progress in developing both NBC and missile programs is final confirmation to Iran's policy-makers that it has chosen the right path.

³³ Anthony H. Cordesman and Martin Kleiber, *Iran's Military Forces and Warfighting Capabilities : The Threat in the Northern Gulf* (Westport: Praeger Security International, 2007), 8,9,10

³⁴ Peter R. Lavoy, Scott Sagan and James Wirtz, *Planning the Unthinkable : How New Powers Will Use Nuclear, Biological, and Chemical Weapons* (Ithaca: Cornell University Press, 2000), 84. Lavoy assesses that America had greater concerns about the spread of Iranian Islamism than Iraqi use of chemical weapons.

Within the armed services, two bodies compete for influence on policy issues. The Artesh, or Regular Armed forces, focuses primarily on external threats. It therefore has a direct interest in security affairs regarding the United States. Under Ahmedinejad's predecessor, Khatami, the moderate-leaning Artesh rose in prominence in strategic decision-making. Reviled by many of his peers in the Revolutionary council for his moderate social and foreign policy views, Khatami represented popularism against the government. The prominence of the Artesh suffered considerably upon Ahmedinejad's election (a former IRGC commander) and the IRGC reclaimed its seat closer to the Ayatollah. Nonetheless, as the force primarily charged with the defense of Iran against outside threats, the Artesh cannot be ignored.

Artesh support for NBC and missile programs stems from its desire, until 2003, to match Iraq's façade of a WME capacity.³⁵ Following Saddam Hussein's collapse and the exposition of his WME fraud, Iran was left with a capability without an explicit target. The utility of maintaining such an arsenal was not lost on the Artesh, who now shifted the focus of their program to the US. The mission now became to deter American military intervention, arguably now that US troops were stationed on its western and eastern border. That the Artesh has no known specialty units to employ either NBC weapons or long-range missiles does not lessen its support for their deployment.

For reasons unknown to analysts (other than wide speculation), ballistic missile forces (and other specialized weapons and units) fall under the command of the Iranian Revolutionary Guards Council (IRGC) and not the Artesh. Ironically, the IRGC's primary mission is to repress domestic threats to the Islamic regime. As such, prior to the Iran-Iraq war, IRGC played a less significant role in foreign policy development than today, and an identity crisis of sorts has developed within the IRGC.

While the Artesh focuses on conventional armed forces, the IRGC is developing an asymmetric, Special Forces, unconventional and ballistic missile capability. At the same time, it must balance

³⁵ Daniel Byman et al. eds., *Iran's Security Policy in the Post-Revolutionary Era* (Santa Monica: RAND, 2001), 3

between command and control of domestic security units and strategic weapons units. The IRGC command has stated on numerous occasions that it is modifying its structure and tactics to counter what it perceives to be American weaknesses observed in Iraq and Afghanistan.³⁶ This relatively new role perplexes analysts and obscures the IRGC's real influence in policy development.

The IRGC's zealotry in supporting the Islamic revolution is also taking a pragmatic turn. Heavily involved in Iranian industrial production and economic institutions, the IRGC vigorously protects and seeks to expand its influence over more aspects of the Iranian state than simply security. As such, its loyalty to the regime has come under scrutiny by the Supreme Leader, and the body enjoys less trust than it did before Khatami took power in 1989. At a minimum the Artesh and IRGC influence Iranian foreign policy to a large degree. US authorities therefore take notice of statements from both, such as when the IRGC Commanding General, Yahya Rahim-Safavi, was quoted as saying that Iran intends to employ a strategy of "*...utilizing long-range and surface-to-surface missiles...*" and is prepared to transfer ballistic missile technology to "*neighboring and friendly countries.*"³⁷

The IRGC's approach to security policy is traditionally erratic and unsynchronized with national security policy. Historically, the IRGC seems oblivious to possibilities of fatal retaliation from its intended targets and the consequences its actions have in the non-military arena. For example, during the Iran-Iraq war, the IRGC advocated and executed surface-to-surface missile attacks against Kuwait as well as threatened to attack Saudi offshore oil platforms. Both of these actions directly contravened Iran's diplomatic efforts to improve relations with Kuwait and Saudi Arabia to help undermine Iraq.³⁸ This aspect of IRGC strategic thinking is troubling and obscures understanding of Iranian policy-making.

³⁶ Cordesman, 13. The commanding general of the IRGC, GEN Safavi states, "The Americans have major weaknesses. In fact, the Americans have demonstrated their weaknesses and points of strength in wars in Afghanistan and Iraq. We have precisely planned our strategy in line with their weaknesses and strengths."

³⁷ Cordesman. 13

³⁸ Lavoy. 6

In placating domestic desires, Iranian authorities recognize the national pride associated with both long-range missiles and nuclear capability. Ahmedinajad said, *“The train of the Iranian nation is without brakes and a rear gear... We dismantled the rear gear and brakes of the train and threw them away some time ago.”*³⁹ Whether or not Iran’s leaders are happy with the irreversible nature of their nation’s advance into nuclear and ballistic missile territory is another issue. Their capacity to reverse course regardless of Western incentive appears non-existent. During previous periods of record-high oil prices, the government heavily subsidized daily life. With Iran’s current economic dilemma, policy makers will seek to distract the population from new hardships through Western scapegoats. This vulnerability stems from what analyst Saeed Laylaz calls *“the Iranian version of the China model. The difference is that in China economic prosperity is underwritten by economic productivity. In Iran, the middle group is bought off with oil money.”*⁴⁰

Beset by economic hardship and critically impaired in the long-term by the Iran-Iraq war, Iran’s security and defense services have accepted that they cannot compete with their neighbors in conventional offensive weapons procurement. Coming in last place in the region, Iran has only been able to spend \$2.3 billion on weapons procurement between 1997 and 2004. The inability to modernize its conventional force is compelling Iran to pursue more cost efficient security alternatives.⁴¹ The consensus among the policy bodies described above is on the benefits of unconventional weapons and long-range ballistic missiles. Combined with sensitivity over domestic approval, these factors speak conclusively to the prediction that Iran, rather than comply with international calls for compliance on proliferation and weapons development, will eagerly hurtle towards nuclear, ballistic missile competence to confront all who oppose it.

³⁹ Cordesman. 13

⁴⁰ Farideh, Farhi. “Iran’s “Security Outlook” *Middle East Report Online*, 9 July 2007, available from <http://www.merip.org/mero/mero070907.html>; Internet; accessed February 2009.

⁴¹ Cordesman. 29

Given the pessimistic outlook for the future of US-Iranian relations, and accepting the reality that Iran will be an existential threat, regardless of non-military efforts to neutralize them, the only tool to assess GMD's role in US security strategy towards Iran is a comparative analysis of capabilities. Sources on Iranian capability all suggest that Iran possesses a limited domestic missile production and development capacity. Relying heavily on Russia, China, and North Korea, Iran has made steady progress in its nuclear and ballistic missile programs, and presents a legitimate threat to the US and Europe. As part of its oft-stated strategic goals, Iran intends to eventually divest itself of foreign technology and production and sustain an entirely domestic program.⁴²

MDA anticipates that Iran will field a long-range ballistic missile in 2015.⁴³ The Iranian exercise Great Prophet III appears to validate this estimate. Executed in July 2008, the IRGC launched nine intermediate-range Shahab-3 (Meteor-3) rockets.⁴⁴ The Shahab-3 is a variant of the North Korean No-dong Intermediate-Range Ballistic Missile (IRBM) with a range of 1300km. Iran has fielded the Shahab-3 in one battalion of 6 launchers and 24 missiles within the IRGC.⁴⁵ This capability to range the majority of the Middle East and part of Russia is part of Iran's ongoing Iranian missile development program (see Figure 2, next page).

⁴² Cordesman, 34

⁴³ MDA European Missile Defense assets. 3

⁴⁴ Bi Mingxin, "Iran Test Fires New Long- and Mid-Range Missiles" *Xinhua News Agency*, 9 July 2008, available from http://news.xinhuanet.com/english/2008-07/09/content_8517337.htm; Internet; accessed February 2009.

⁴⁵ Gary Samore, *Iran's Strategic Weapons Programs: A Net Assessment* (London: Institute for International Strategic Studies, Routledge, 2005), 91



Figure 2. Current Iranian Missile Ranges.

Under current development with Russia, China and North Korea, the Shahab-4, 5 and 6 represent incremental increases in range and capability, with the sixth variant projected to hit ranges of over 6000km.⁴⁷ Of further concern is the reported warhead configuration for the Shahab-6 nose. Modified to carry a lighter, 1000kg warhead, the missile achieves increased range and the capability to deliver airburst munitions. Weapons analysts presume that the lighter warhead will need to have a more devastating, unconventional weapon within it to produce similar or greater results than the Shahab-3.⁴⁸

Work on the Shahab-6 has been under heavy security since 1997, secretly developed in concert with the North Korean Taep'o-dong-2 Long-Range Ballistic Missile (LRBM) program. By comparing

⁴⁶ Ibid. 90. It is important to note that the rings represent ranges of rockets fired from the extreme periphery of Iran's borders.

⁴⁷ Samore, 43, and MissileThreat.com. Shahab-6, available from http://www.missilethreat.com/missilesoftheworld/id.110/missile_detail.asp; Internet; accessed February 2009. Samore describes North Korean-Iranian cooperation in detail. The formal cooperation relationship on missile development between the two has existed since the Iran-Iraq war. Despite Iranian complaints on quality and North Korean complaints on delivery of payment, the relationship remains strong. Iranian military leaders were guests of honor at North Korea's inaugural test launch of the Tae-po Dong.

⁴⁸ Christopher Langton, Colonel, *The Military Balance 2005-2006* (London: International Institute for Strategic Studies, 2005), 175.

the two systems, analysts conclude that the Shahab-6 may have a rocket burn time that would classify it as an Inter-Continental Ballistic Missile (ICBM), and therefore present an intolerable threat to US forces in Europe and the Middle East, as well as to US allies. A further intolerable aspect of the Shahab-6 program is the statement by the IRGC leadership that Iran will export the system to other US adversaries once developed.

With an estimated production rate of 10 Shahab-3 missiles per year, Iran's limited strategic capabilities have two purposes. Towards the US and Europe, the desired effect is political. Regardless of its pride, Iran cannot fool itself that it can achieve anything close to destruction of either Europe or the US, and would face a fatal counter-strike if it tried. In this regard, possession of these systems is designed to achieve respect and deter conventional incursions. In borrowing more than just nuclear technology from North Korea, it uses the threat of the capability to earn itself a better seat at the table, forcing the world to acknowledge its relevance.

In its other purpose, Iranian strategic weapons have a practical and sinister capability. Surrounded by arguably hostile, Sunni-dominated nations, Iran can radically alter, if not destroy its neighbors. Referred to as "one city" states, Iran's neighbors can be destroyed by a few nuclear-armed missiles because of the limited numbers of vulnerable targets. Israel, Saudi Arabia, and other Gulf states allied with the US are acutely aware of this vulnerability.⁴⁹

Along with the Shahab series, Iran is developing air and sea launched cruise missiles with ranges in excess of 3000km. North Korean, Chinese and Russian assistance in modifying Iranian aircraft may support future air launched cruise missiles.⁵⁰ Based on the Ukrainian and Russian BM-25 and KH-55 cruise missiles, these programs represent an NBC capable intra-atmospheric missile threat that only non-

⁴⁹ Cordesman 29.

⁵⁰ Cordesman 155.

GMD systems can address. A potential simultaneous Iranian ICBM and cruise missile strike would overwhelm single tier (Aegis alone) missile defense capabilities and successfully hit European targets.

The question therefore becomes one of intent. Whereas Iran will have the capability to destroy a “one-city” state, it will only have the capability of politically influencing Europe or the US. The explanation for this dichotomy is technical. Given the infancy of Iran’s nuclear program, it is most probable that Iran’s first weapon will be atomic. Distinguished from a nuclear device, an atomic weapon relies on the induction of nuclear fission, rather than fusion to generate explosive energy. Whereas there are varying degrees of sophistication within the Atomic weapon genre, they are universally far less efficient than a nuclear fusion device.

Atomic weapons have two basic forms. In the gun-bomb system, a small amount of sub-critical fissile material such as Uranium or Plutonium fires into a larger mass of the material, causing a chain reaction resulting in the explosive release of radioactive energy.⁵¹ Considered unsophisticated in the nuclear community, this weapon delivers a sub-optimal explosive yield, and is less efficient than the technology used in the two atomic weapons used against Japan.

The second, more sophisticated method, involves a chemical explosion around a mass of fissile material, imploding it into critical mass, resulting in the release of radioactive energy. Iran is not yet capable of producing this form of weapon, since the only fissile material that can be used is plutonium, the accumulation, milling and storing of which is extremely difficult, and beyond Iran’s current capability. To achieve a significant yield of 15-20 Kilo-tons, the size that destroyed Nagasaki, an Iranian bomb would need to weigh approximately 8,000 kg, double the weight of its more sophisticated, plutonium based WWII predecessor.⁵²

⁵¹ Henry DeWolf Smyth, *Atomic Energy for Military Purposes* (Princeton: Princeton University Press, 1945), 2, paragraph 1-42.

⁵² Jeff Hughes, *The Manhattan Project: Big Science and the Atomic Bomb* (New York: Columbia University Press, 2002), 84. If the Iranian program results in weapons-grade plutonium, and the technology necessary to produce, mill and arm its warheads is provided by an outside source, this argument would become

Iran cannot launch a long-range missile with a warhead greater than 1,000kg armed with a gun-type atomic warhead. The conclusion therefore is that Iran can launch a devastating attack on its “one-city” neighbors, effectively destroying them, but can only launch an influential strike against our European allies. The resulting understanding is that GMD’s purpose is to deny Iran’s ability to coerce European decision making through use of force. It is further understood that protecting their populations from the limited, but significant losses from an Iranian strike appeals to our NATO partners.

Assuming MDA intercept capability data is correct, and that further refinement of the system corrects the flaws highlighted by critics, GMD is undeniably necessary to comprehensive ballistic missile defense from an Iranian threat. Whereas currently deployable systems, such as a Mediterranean based Aegis cruiser, can handle an intra-atmospheric Iranian cruise missile threat, GMD is required to cover a combined Iranian ICBM and cruise missile strike. Furthermore, Iran has demonstrated a rapid increase in missile sophistication, suggesting that MDA’s assessment of an Iranian LRBM/ICBM capability is correct. MDA correctly argues that deploying GMD when the Iranian threat is ready is too late. To do so would dangerously assume that the US could predict when Iran is ready, and assumes that political conditions in Europe will allow for GMD’s deployment. In this regard, MDA makes its strongest point on GMD. To deploy the GMD, even in its current, disputably capable configuration, is more prudent than waiting for a perfect solution that comes too late.

Russia

Russia remains the dominant missile technology competitor with the US. A legacy of Cold War research and development, Russia possesses the only educational, economic and industrial potential to match US missile defenses. Despite this capability, Russia presents the least likely direct ballistic missile threat to the US, regardless of Russian rhetoric. The protocol legacy of the Cold War and the array of

moot. At 1000kg, a series of LRBMs delivered advanced nuclear (vice atomic) warheads would be devastating to European targets and provides further incentive for European support to both GMD and sanction against Iran.

mutual Russian and American economic interests make Russia more of an opportunity than a threat on issues of missile defense. Over the course of the Cold War, substantial formal agreements on arms control, proliferation and strategic stability developed a deep tradition of compromise and negotiation. GMD cannot protect the US from Russian ballistic missiles. It can, however, be used as a tool of established protocol to negotiate against Russia's real threat, which comes from its continued support of Iran's missile and nuclear power ambitions.

One of the most harmful aspects of GMD to US-Russian relations is that it required America to withdraw from the Anti-Ballistic Missile Treaty of 1972. Designed to ensure parity in striking one another in the event of a nuclear exchange, the treaty formed part of an effective agreement regime that reinforced Russian and US concepts of nuclear deterrence. As a cornerstone of accepted deterrence and strategic stability, its demise shook decades-old senses of security.⁵³ However, the Bush Administration made a conscientious decision that the threat emanating from North Korea and Iran required immediate attention, especially given post-Cold War change in Russian circumstances. According to John Bolton, senior fellow at the American Enterprise Institute and former US Ambassador to the UN, *"freeing America from the 1972 Anti-Ballistic Missile Treaty's [was] one of President Bush's most significant achievements... the emerging threats from rogue states possessing a few nuclear-capable ballistic missiles required that we develop adequate defenses -- especially because many emerging nuclear-weapons states do not accept the same calculus of deterrence that maintained the Cold War's ...nuclear standoff."*⁵⁴

⁵³Dougherty. 392. The relevance of ABM to Russo-American relations is that its strict limitations on defensive measures made each side vulnerable to one another, and therefore dependent on the honesty of his adversary. This paradox required an enormous amount of mutual trust and shared interest. Dismissing ABM therefore challenged the tradition of negotiated trust between the two nations and destabilized the mutual understanding of security policy.

⁵⁴ John R. Bolton, "Obama and Missile Defense. On This Critical Issue the President-Elect Is Not Off To A Good Start" *Wall Street Journal*, November 18, 2008, available from <http://online.wsj.com/article/SB122654051563123143.html>; Internet, accessed February 2009.

Aware of limited economic and conventional military strength, and fearful of the disintegration of the treaties that have kept it relevant, Russia has entered a new era of realist-based security policy. Led by former Russian President Vladimir Putin, the effort to reform foreign policy has met with stiff resistance by many within the Russian policy-making arena. Contemporary Russian policy is torn between many who cling to Soviet era notions of competition with the US and geographic security, and those that advocate Western-styled reform unpalatable to most Russians.

Any increase in US capability to defeat a Russian strike causes Russian theorists to fear a return to an arms race and the threat to Russian arsenals in the long term. In reaction, Russia itself withdrew from stabilizing agreements, most notably the Conventional Forces in Europe Treaty (CFE). Russian pursuit of new weapons programs and the deployment of short-range ballistic missiles are both pragmatic and conceptual attempts to retrieve a semblance of a balance of power. Whether or not Russia can actually follow through with these threats is largely irrelevant, because the true cost is the loss of a commonly accepted protocol for negotiation and compromise. Looming on the horizon is the expiration of the START I treaty in December 2009, the non-renewal of which would have catastrophic effects on US-Russian security cooperation. According to Ruben Sergeev, disarmament specialist, *"Without the mutual control agreements embodied in the START treaty, Russia, as the weaker partner, would lose all possibilities to keep tabs on the Americans' quickly developing strategic nuclear forces."*⁵⁵ US withdrawal from ABM, unstable energy prices and the emergence of existential threats in Iran and North Korea have altered the Russian-American negotiating process, and present substantial policy challenges to Russian civilian authority.

Vladimir Putin, in assuming the Russian presidency, inherited a foreign policy apparatus ridiculously at odds with Russian interests and capability. Grasping at Cold War notions of geo-strategic

⁵⁵ Tom Parfitt, "Russia Boosts Nuclear Spending with Order of 70 Strategic Missiles." *UK Daily Guardian*, December 23 2008, available from <http://www.guardian.co.uk/world/2008/dec/23/dmitri-medvedev-barackobama/>; Internet; accessed February, 2009.

competition with the US, Russia followed an awkward mix of economically necessary submission towards its Western “sponsors” and reliance on Soviet-era military balance-of-power competitiveness. Putin took steps (presumably to be followed by Medvedev) to address this malformed duality. However, “Russia is preparing for entry in the WTO and at the same time reinstating the old Soviet anthem; she is abandoning the death penalty while pursuing a ruthless war in Chechnya.”⁵⁶ Russian policy, as in any nation, is the sum of its influential parts. Regardless of Putin’s power and pursuit of policy reform, he is still subject to the competing demands of his political system.

The predominant policy divisions in the Russian state are Western-minded reformers, or Zapadniki, ardent nationalists, or Vielikorossy, striving for “Great Russia’s” re-birth, and Eurasian constructivists, or Yevraziytsy. The latter have a conception of a broader, Eurasian Russia, and are the most hostile toward the US and NATO expansion.⁵⁷ The rationale for constructivist hostility is validated by NATO expansion of influence in the former Commonwealth of Independent States (CIS). Developing a cogent policy from this assembly of opinion requires compromise on Putin’s part over the extent of his reforms.

A further, essential aspect of Russian foreign policy is the need to be recognized as a near-peer power in global affairs. Russia’s descent from face to face negotiations with the US over nuclear weapons was exacerbated by US policy following the Cold War that essentially marginalized Russia and relegated it to second-world status. To replace the influence lost from this decrease in prestige, Russia has had to rely on increasingly controversial means to maintain relevance. Among these have been the energy wars fought with the Ukraine, and its technical support to Iranian nuclear programs. US policymakers cannot underestimate the appeal that a joint agreement on security would have to Russia, and examine the possibility of such a policy course regarding GMD.

⁵⁶ Sergei Medvedev, *Rethinking the National Interest: Putin’s Turn in Russian Foreign Policy* (Garmish-Partenkirchen: The George C. Marshall Center Press, 2005), 57.

⁵⁷ Marcin A. Piotrowski, *Russia’s Security Policy*. ed. Janusz Bugajski, “Toward an Understanding of Russia : New European Perspectives” (New York: Council on Foreign Relations, 2002), 60,61

Putin is attempting a national security policy commensurate with Russia's capabilities and political needs. Among these, the creation of a multi-polar world to thwart US hegemony (in which Russia is a "gravitational pole"⁵⁸) is the dominant policy goal.⁵⁹ Putin has acknowledged that former balance of power policies based on direct competition with the US are no longer realistic. The tone thus has switched from one of preventing NATO encroachment to that of "collective" struggle against terrorism and continental security.⁶⁰ This approach finds favor with both the Eurasian constructivists and the Zapadniki. The former support its defense against American hegemony, and the latter support the softer tone of cooperation with the broader West. However, the Vielikorossy (Great Russians) are generally unhappy with not being able to be the other pole in their aspirations for a Russian-American bi-polar world.⁶¹

The second aspect of Russia's foreign policy is to secure its influence over what it terms 'the near abroad', a geographical construct of states on Russia's border and those that formerly fell under the Soviet Union.⁶² The US under the George W. Bush administration directly challenged Russia in this policy goal repeatedly by vigorously encouraging Georgian and Ukrainian accession into NATO and recognizing the independence of Kosovo. GMD's offense to Russia is in its bilateral deployment to Poland.

Both goals represent a new course for Russia that Putin must sell to the world and to his policy elites at home. These policies attempt to balance cooperation with the West while securing Russian interests. *"Putin still envisions Russia as a "power," but in a different sense; his policy is not pro-*

⁵⁸ Eugene Rumer, *Russian Foreign Policy Beyond Putin* (London: Routledge, 2007), 23.

⁵⁹ Bobo Lo, *Vladimir Putin and the Evolution of Russian Foreign Policy* (London: The Royal Institute of International Affairs, 2003), 79, 80, 81 and Bugajski, 64.

⁶⁰ Lo, 79

⁶¹ Piotrowski, 62

⁶² Lo. 80, 81 Bugajski. 62. Rumer, 23. Medvedev, 56.

Western, but pro-Russian, of a pragmatic variety.”⁶³ This policy finds universal support among policy elites, but meets with some resistance from the Zapadniki over its belligerent tone towards the West. Lethal intervention into Georgia and confrontation between NATO and Russian troops in Pristina, Kosovo in 1999 are cause for their concern.

The Russian political leadership (Putin and those close to him) responsible for policy-making has achieved firmer control of policy-making in recent years. Crackdowns on political opposition and the recent passage of a bill extending Presidential term limits lead most analysts to believe that Putin will resume the presidency following Medvedev’s term in 2012.⁶⁴ Although much will change by then, Putin has pointed the Russian ship in a direction that will be difficult to turn around. At a speech to his outbound ambassadors, Putin explained his approach.

*“... we have reached a point today where the entire global security architecture is indeed undergoing modernization... If we let old views and approaches continue to hold sway, the world will be doomed to further futile confrontation. We need to reverse these dangerous trends and this requires new ideas and approaches.”*⁶⁵

In any leadership environment, personality has just as much effect as formal trappings of authority. For Putin, a marked preference for “Pitertsy”, or those from St. Petersburg⁶⁶, has flavored his politics. As such, as one ministry head leaves and another one enters, the dynamic of influence changes. For example, one of Putin’s most trusted advisors, Igor Ivanov, following his time as Foreign Minister, chaired the National Security Council. While in this position, Ivanov elevated the importance of the

⁶³ Medvedev, 56.

⁶⁴ “Russia Approves Presidency Bill” *BBC News*, 22 December 2008, available from <http://news.bbc.co.uk/2/hi/europe/7795310.stm>; Internet; accessed January, 2009.

⁶⁵ Vladimir Putin, Speech at Meeting with the Ambassadors and Permanent Representatives of the Russian Federation, 27 June 2006, available from http://www.kremlin.ru/eng/speeches/2006/06/27/2040_type82912type82913type84779_107818.shtml; Internet; accessed February 2009.

⁶⁶ Herspring, 170. Also referred to as the “Petersburg Chekists”, this informal group of Putin loyalists from St. Petersburg included large numbers of former security and intelligence service officers, or “Siloviki” and political liberals. These liberals, who helped him navigate the post-Yeltsin struggle for influence over Yeltsin oligarchs soon fell out of favor. The Siloviki, who helped Putin ingratiate himself with Moscow based security service officials and adhere generally to his world view, became the new political elite.

council to new levels, only to have it fall again once a less trusted, yet no less competent Vladimir Rushailo replaced him.⁶⁷

Putin's biggest challenge over policy towards the West comes from the Russian Ministry of Defense (MOD). The MOD, assuming its Soviet pre-eminence on issues of national security policy, advocated new doctrines for the employment of strategic forces, alarmingly at odds with traditional uses for nuclear weapons. Dominated by "Great Russians", the MOD presents Putin with a conflict between pursuing a foreign policy that would make Russia an included partner in shaping global politics, and supporting military policies that would make it a pariah.

The traditional Soviet lead on issues on national security, the elite of the MOD were incensed by Russia's catastrophic fall in geo-political influence, and saw the period under Yeltsin as an insult to Russia's perceived rightful place as a world leader. *"In Russia, military power, territorial issues, threat perceptions, and notions of strategic balance have assumed a prominence unmatched anywhere else on the planet. In fact, so entrenched is the geopolitical mentality that the end of the cold war, in most of the developed world a watershed in the transition to a new global politics, has had little impact on the Russian elite."*⁶⁸

In no other arena has the pressure from the MOD been greater than over GMD. Whereas Russian political consensus existed over military intervention in Georgia, in issues regarding the US and Europe, the split between Zapadniki and the MOD differ widely.⁶⁹ Evidence of the split followed the signing of

⁶⁷ Lo, 36. It must be noted that international relations change just as often. What was true under Clinton, where Russia was patronized, changed under Bush, where Russia was first a partner, then a quasi adversary. It is too early to understand where U.S.-Russian relations will go under President Obama.

⁶⁸ Lo, 72. Lo expands that, "...during the first post-Soviet decade, the latter continue to think and act within the conceptual framework of a well-understood geopolitical triad: zero-sum games, notions of balance of power, and spheres of influence." Although examples of military to military cooperation existed, arguably on a superficial level, this concept is true regarding the MOD's perception of Russian sources of power.

⁶⁹ "The Making of a neo-KGB State." *The Economist*, 25 August, 2007, available from http://www.economist.com/world/displaystory.cfm?story_id=9682621; Internet; accessed March, 2009. A further subset of influential persons is the Siloviki, or former security service officials who generally side with the MOD and enjoy close relations with Putin. See note 66 on preceding page.

the US-Polish GMD agreement in August 2008. President Medvedev downplayed a scathing comment from General Anatoly Nogovitsyn, the Deputy Chief of Staff of Russian armed forces. Nogovitsyn's statement that Poland *"is exposing itself to a strike"* and *"By hosting these [US missiles], Poland is making itself a target. This is 100 percent certain,"* was followed by Medvedev's mellower comments to German Prime Minister Angela Merkel. *"[The signing of the US Polish missile agreement] is sad news for all who live on this densely populated continent, but it is not dramatic."*⁷⁰ Not only does the statement soften Novgovitsyn's, it also couches Russian response into a collective concern for the continent.

Putin's handling of the MOD has been a series of difficult attempts at leadership changes. Whereas Putin has been relatively successful at installing loyalists within the MOD, those that have been removed prove to be resilient policy opponents. As a primary example of both Cold War conservatism and the difficulty in maneuvering in Russian politics, one can look to Igor Rodionov, a highly respected former General. Removed by Yeltsin for failing to submit the ministry to civilian leadership as directed, Rodionov entered the political system and now serves in the Duma, on the influential Russian Committee on National Security, and is Chairman of the Professional Union of Military Personnel.

Taking another approach, Putin campaigned vigorously to alter the MOD's mentality. The MOD, dominated by Great Russians and Eurasian constructivists, views alliances and treaties as tactical means to secure the Russian strategic end: Russian territory. Putin's approach is a role reversal. Putin views compromise on territorial issues as a critical aspect of Russia's pursuit of global multi-polarity. The value of judicious use of compromise to Western encroachment is the type of quid pro quo that will ensure Russia a seat at the world table.⁷¹ So far, Putin has failed. "It soon became clear that however much

⁷⁰ "Moscow: Poland Has Made Itself a Nuclear Target with US missile deal." 15 August, 2008, *Daily Mail Online*, available from <http://www.dailymail.co.uk/home/index.html>; Internet; accessed February 2009. Russian President Dmitri Medvedev's statement came days later during a meeting with Merkel, suggesting a deliberate stimulation and assessment of Western reaction to Nogovitsyn's statement (reconnaissance by fire). His downplaying of the situation may have come at the direction of Zapadniki-leaning diplomats in the foreign ministry, or Putin himself.

⁷¹ Medvedev, 55. In *Future War*, Military theorist and President of the influential Academy of Military Science Lieutenant General (retired) Makhmut Gareev argues against the unfavorable circumstances Russia places

Putin might want to compromise on the ABM issue, he was not able to deliver the Moscow bureaucracy. The Russian military, one of the most conservative institutions in the country, was still locked into the mentality of the Cold War, deeply suspicious of anything that came from the United States and frozen by inertia into anti-U.S. policies – arms proliferation, nuclear deterrence, provocative military exercises.”⁷²

MOD’s resistance to GMD is based on several factors, the first of which is the global strategic significance of America’s unilateral decision to withdraw from ABM and deploy a system to Eastern Europe. This decision was made with the understanding that Russia no longer had options for a response. This Geo-Political statement exposed Russia’s vulnerabilities, insulted its pride and reduced its standing at a time when Russia is trying to regain credibility.⁷³ In essence, GMD is calling the Cold War bluff regarding the use of nuclear weapons, undermining the deterrent effect of Russia’s last real card. Rather than approach the challenge realistically, as advocated by Putin, MOD has used its influence to obtain more strategic weapons. In December 2008, Russia ordered 70 new ballistic missiles to augment its current fleet of approximately 60 Topol-M ICBM’s and its more numerous Soviet-era classmates. The decision has two effects in mind. First, it must replace its aging liquid fuel rockets, which are being decommissioned more rapidly than can be replaced. The second, more important effect is to improve its tools for negotiating a new arms reduction treaty to replace START.⁷⁴

The allies Putin has within the government are predominantly former intelligence service comrades and the Ministry of Foreign Affairs (MFA). Combined into this oligarchy are a variety of

itself under in time of war because of political expedience. His advocacy of a more technically advanced military, with a modernized military art linked to political will suggests that Putin’s tolerance of territorial encroachment is limited. Russia has already embarked on a modernization program and it is likely that the political will to fight, as evidenced in Georgia, is following suit.

⁷² Dale R. Herspring, *Putin’s Russia, Past Imperfect, Future Uncertain* (New York: Rowman and Littlefield Publishers, INC, 2005), 271. Russia’s controversial arms sales reflect both inertia in changing policy, as well as the practical requirement for Russia to keep its arms industry solvent.

⁷³ Lo, 88.

⁷⁴ Parfitt.

wealthy individuals whose fortunes rest on the good will of the Russian president. Putin has made clear in the past the consequences for political betrayal and the benefits of loyalty.

The MFA has had to overcome the reputation of several of its ministers to reach its current position of influence. Andrei Kozyrev, the first post-Soviet minister, made a headlong leap into Western liberalization and alienated the Ministry from most other foreign policy entities. His successor, Yevgeny Primakov, did much to bring the MFA back into political credibility but was followed by Igor Ivanov, who Putin appointed later as the Secretary of the National Security Council.⁷⁵ Ivanov's assignment indicates a more powerful role for the MFA in policy making which was cemented by his successor.

The current foreign minister, Sergei Lavrov, is a career diplomat and former Russian ambassador to the UN. In this capacity he presided over the UN security council on seven occasions⁷⁶ and is enormously respected within the Russian policy community, although he is not a Putin insider. Where the Ministry of Defense enjoys the monopoly of expertise on the technical issues of missiles and nuclear weapons, the MFE is the resident expert on a breadth of issues unmatched by any other body.⁷⁷ Lavrov heads a ministry whose approach to compromise and securing Russian interests is conservative yet pragmatic. In this regard, Putin has an intellectual filter for his own reformist views and for the more nationalist, traditional security perspectives of the MOD.⁷⁸

Russian policy will continue to be dominated by Vladimir Putin and his two objectives of multipolarity and influence over the near abroad. Neither the MOD or MFA are wholly opposed to the concept of GMD, but have been forced into violent invective by the threat to the near abroad posed by stationing

⁷⁵ Andrew E. Kramer, "Russia : Security Council Official Resigns" *New York Times*, 10 July 2007, available from http://www.nytimes.com/2007/07/10/world/europe/10briefs-Ray-Ivanov.html?_r=2&oref=slogin; Internet; accessed February 2009.

⁷⁶ UN, Presidents of the UN Security Council, 1990-1999, available from <http://www.un.org/Depts/dhl/resguide/scpres1990.htm>; Internet; accessed February 2009.

⁷⁷ Lo. 33

⁷⁸ Lo. 88. Lo argues this was especially true during Russian decision making during the US invasion of Iraq, development of relations with NATO and with details regarding disarmament negotiations.

the system in Poland and Czech Republic and the Geo-Political loss of face should Russia's nuclear ballistic missile arsenal be rendered obsolete. Keeping these two Russian security concerns in mind, GMD must not be abandoned for the sake of positive US-Russian relations. Alternatives include constructive renegotiation of START limitations and inclusion of Russians in development of a ballistic missile defense plan.⁷⁹

Despite contemporary disagreement, a history of cooperation on ballistic missile defense exists between Russia and the US. MDA's predecessor, the Ballistic Missile Defense Organization (BMDO) oversaw several Reagan era initiatives that intended to develop missile defense jointly in order to maintain the strategic parity so vital to peace. In assessing the need for missile defense against any threat, the Reagan administration, followed by the George H.W. Bush administration, attempted to include Russia in its program development. In 1997, under President Clinton, a formal agreement was concluded which called for the development of a Russian American Observation Satellite (RAMOS) to provide early warning of global missile launches. However, by 2002, BMDO had transformed into MDA, and the new George W. Bush administration decided on a unilateral course towards missile defense.⁸⁰ Arguably, RAMOS was never an efficient program, hindered by well-informed mistrust over Russian technology sharing with American adversaries and the lack of equitable funding. This led America to the logical belief that it was receiving little from the program. Between the distraction of the attacks of September 11, 2001, and the Bush administration's desire for intimidating military dominance, Russian-American cooperation on missile defense succumbed to unilateral security policy.

⁷⁹ However, this view is not shared by many within the US policy community. Former Secretary of State Rice does not believe Russia can be made a partner, particularly given its close association with Iran. "It would be foolish in the extreme to share defenses with Moscow as it either leaks or deliberately transfers weapons technologies to the very states against which America is defending."

⁸⁰ G. Wayne. Glass, Dr., "U.S. And Russian Cooperation on Missile Defense: How Likely?" *Center For Defense Information*, 29 May 2002, 2. It is undeniable that the US Secretary of Defense, Donald Rumsfeld, played a lead role in introducing missile defense at the expense of ABM. A proponent of missile defense since the Ford administration, Rumsfeld has been the leading advocate for GBMD since his appointment as secretary of defense.

Despite the harsh rhetoric on GMD originating from Moscow, subtle messages from senior Russian leaders emerge that indicate a willingness to return to a joint defense program. While castigating everything about the deployment of GMD, Russia has, on more than one occasion, offered its facilities in Azerbaijan for the stationing of America's X-band radar. As recently as March, 2009, Russian Foreign Minister Sergei Lavrov reiterated that Russia's invitation to use their facility in Gabala, Azerbaijan, "remained on the table."⁸¹ This invitation is an indicator of a greater Russian desire to negotiate with the US on missile defense, thus restoring its global prestige and influence and benefitting from the technological advances that would accompany such an agreement.

The obvious difference highlighted in this respective analysis of Iranian and Russian policymaking is that Western concepts of deterrence and rationality are not universal. The approach to GMD therefore must take on several distinct characteristics to match the challenges presented by both nations. Although Russia's rationale for its policy decisions cannot always be divined, the West can take comfort in the tradition of negotiation and mutual interest that prevents Russia's use of nuclear-armed ballistic missiles. GMD's value in that context is as a multi-purpose negotiating tool, a Swiss-Army knife of carrots and sticks.

Iran, however, cannot be deterred from pursuing its current course of nuclear and ballistic missile programs and the eventual use of these weapons. Issues of domestic pride, regional insecurity and the example of North Korea make this a near fact. Furthermore, the shared rationality enjoyed with Russia is completely absent from Iranian-American understanding. Concepts of martyrdom, defense of Islam and what victory consists of are not well-enough understood to be integrated into a broad deterrence policy towards Iran. The Arab and Persian reaction to the Israeli withdrawal from southern Lebanon and the

⁸¹ "Lavrov Seeks to Extend Radar Lease," *Moscow Times* 13 March, 2009, available from <http://www.themoscowtimes.com/article/1010/42/375270.htm>; Internet; accessed 13 March, 2009. Despite Lavrov's invitation, Azeri officials have not explicitly given their support for US troops to deploy as part of a permanent presence. In addition, the facility at Gabala has been assessed to be in desperate need of repair and may not be suitable for its intended purpose.

Gaza strip emphasize this alien notion of victory.⁸² It is therefore presumptuous to believe that Iran can be deterred.⁸³ In this context, GMD's value is simpler; it must shoot down any Iranian missile approaching Europe or the US.

⁸² Njdeh Asisian, "The Psychology of Victory in Light of Two Instances of Victory: Hezbollah's Victory in Lebanon and the Al-Aqsa Intifada Victory in Palestine." Foreign Military Studies Office, Fort Leavenworth, August, 2006. Translation and review of an article, *Fasiname-ye Elmi Pashuheshi-ye Amaliyyat-e Ravan (Scientific-Professional Quarterly on Psychological Operations)*. Vol. 3, No. 11, Winter 2006 (Tehran, Iran), pp. 89-96. The article stresses the need to incorporate the population into operations against the oppressor, and more importantly, to wage a protracted war from which victory can be claimed from a political solution. To achieve parity at the negotiating table, and receive something from nothing, is victory itself. In this form of warfare, "No distinction is drawn between peace and war, and negotiations are seen as a means to enhance political and psychological gains."

⁸³ Herspring. 268

Chapter 4. Conclusions and Recommendations.

The unique context of US GMD policy towards Iran, Russia and NATO require multiple paths for GMD. Although any policy must be comprehensive, the subcategories must also be appropriate to the context of their target and their goal. This has required a departure in thinking from Cold War deterrence in that no one comprehensive strategy is appropriate; the depth of actors, including non-state, require a contextual policy, one flexible enough to both deter and defend against an unknown.⁸⁴ No single end can justify one set of means if those means create new problems. Missile defense against an Iranian threat should not be pursued at the expense of NATO unity and Russian relations, just as Russian expressions of opposition should not cause the US to abandon the program.

Despite vigorous public opposition to the deployment of GMD, Russia remains open to joint programs on ballistic missile defense. Combined with the looming threat of a nuclear and ballistic missile capable Iran, and the explicit support of our NATO allies, there is little to support the cancellation of European based ballistic missile defense. On the contrary, the conditional deployment of the GMD system to Europe is an essential and viable component of the nuclear and Weapon of Mass Effect (WME) defense portion of US National Security policy, and NATO's Strategic Defensive Plan.

On Russia

GMD clearly provides the US with the opportunity to develop a security policy that addresses all members of Russia's security apparatus and reduce the tensions created following the abolition of the ABM treaty. Russia's three primary policy schools, the Westerners, the Great Russians and Eurasianists are all influential entities within the Russian policy framework. Their goals cannot be dismissed and must be addressed in GMD policy.

⁸⁴ Dougherty. 391. "In the late 1990s one of the most frequently voiced criticisms was that, since the end of the Cold War, the United State lacked a coherent strategic theory concerning its future security goals and was drifting along in an *ad hoc* way, happy that the former threat of nuclear Armageddon had been lifted and reacting o a pragmatic case-by-case basis without a clear framework to guide public policy." This criticism didn't account for the *ad hoc* adversaries, armed with WME, that would present themselves in the post-Cold War period.

Russian sensitivity towards the erosion of its influence, particularly in the “near-abroad” must be addressed and cannot be exacerbated by continued US pressure. Among America’s most recent policy mistakes has been the deliberate marginalization of Russian influence, manifested by the recognition of an independent Kosovo and the pursuit of a NATO Membership Action plan for Georgia and the Ukraine. Rather than forming a further eroding component, GMD presents an opportunity to restore positive relations with Russia.

The opposition to GMD from Russia’s military is a political facade that belies an invitation to cooperate on missile defense rather than abandoning the system. It is evident that GMD poses no serious threat to Russia’s nuclear arsenal. That the system remains unproven, consists of only 10 interceptors, and would require the consent of NATO to expand in the future are all factors that support this logical conclusion. When paired with the infrequent yet substantial Russian statements on joint use of their facilities, this awkward invitation becomes clear.

The most efficient and feasible policy to restore US-Russian relations is through a formal treaty on missile defense, whose goal is primarily aimed at demonstrating Russia’s importance to a global audience. The simple act of engaging Russia in high profile negotiations and formalized treaties is sufficient to address this important Russian policy need. The most obvious and appropriate mechanism for such a policy is the NATO-Russia partnership council. Only recently rehabilitated after the Russian incursion into Georgia, this body allows the United States to demonstrate a multilateralism that appeals to NATO allies and Russian fears of complete US hegemony.

Inclusion of NATO also reassures NATO members that the risks they assumed to support GMD were well founded. Already, President Obama’s intimations toward Russia on a possible unilateral compromise or withdrawal from GMD deployment have sent ripples of insecurity throughout the alliance. GMD and NATO have gone beyond the point of no return on the matter, and a withdrawal from the

program would cause irreparable damage to America's reputation within the Alliance, as well as cause the alliance to question the reliability and relevance of itself.⁸⁵

Despite US reluctance to subject itself to the inefficiencies and obstacles presented by the competing political desires of its allies and Russia, the long-term effect of such a policy would indicate to the Russians that the possibility exists to advance its policies through peaceful means. As a result, a decrease in the number of dramatic cries for attention, such as the ongoing tensions over European energy prices and the incursion into Georgia is likely.

As the final aspect of this policy approach, America must maintain a technological and diplomatic edge over Russia to ensure US policy goals are met in the long term. Although this requirement may present obstacles during negotiations, tools such as the MAP for Georgia and the Ukraine can be sacrificed to ensure that despite US-Russian cooperation, Russia maintains respect for American capability.⁸⁶ Possibilities include focusing our priority of technological development on the Pacific based component of ballistic missile defense, under the logical guise that the context of the theater requires different and more advanced technology than the European theater.

On Iran

The opacity of Iran's national decision-making process and the open hostility of Iran towards the unchangeable alliance between Israel and the US make all predictions of their rationality unrealistic and pessimistic. Iran's pursuit of influence in the region and their near-term technical capability suggest that the real targets of their nuclear and ballistic missile programs are their regional competitors and Israel. However, the pace at which both these programs are being pursued, and the substantive progress these

⁸⁵ Bolton. Bolton's criticism of the Obama message to Russia illustrates broad criticism of any change in direction, and highlights the insecurities the letter caused. The Poles in particular have been quick to pressure the US to reiterate its commitment to the recently signed agreement. In the Moscow Times article previously cited: Polish Defense Minister Bogdan Klich emphasized the progress of the technical discussions between the US and Poland in response to questioning on 13 March 2009, undoubtedly to reaffirm the program's progress.

⁸⁶ This respect can have unintended consequences when it breeds fear and distrust. Combined with Gareev and Putin's understanding of US encroachment, it may cause an unintended escalation in tensions.

programs are making suggest that Iranian objectives will change when the capacity to reach Europe and the US with more sophisticated missiles and weapons arrives.

It is contrary to the national security of the United States to abandon programs that will defend it against such a threat, just as it is irresponsible to allow an attack on European soil.⁸⁷ Despite the legitimate arguments against GMD's technical capabilities, abandoning the system only makes the situation worse. The cycle of development and deployment is lengthy and insufficient to try to address the Iranian threat once it arrives. By establishing the necessary administrative and infrastructural requirements in advance of the technological capability is reasonable and responsible. This facilitates future fielding of a fully capable system in a manner that adequately addresses Iranian advances in their weapons program. The current unknown capability of the system to intercept an Iranian missile does not outweigh the need to support the deployment.

GMD is an invaluable aspect of American security policy, offering vast opportunities to manage relations with Russia, reaffirm America's commitment to its NATO partners, and practically defend itself and its allies from ballistic missile threats originating in the Middle East.

⁸⁷ Dougherty, 385. R. James Woolsey, Director of the Central Intelligence Agency, observed that following the Cold War, "...we have slain a large dragon. But we now live in a jungle filled with a bewildering variety of poisonous snakes. And in many ways, the dragon was easier to keep track of." In the absence of mutual understanding and effective communication, as in the case of Iran, where the US has no formal diplomatic presence, it is critical to prepare for the failure of what we can very loosely call deterrence.

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